



CodeViewer™ Software User Manual



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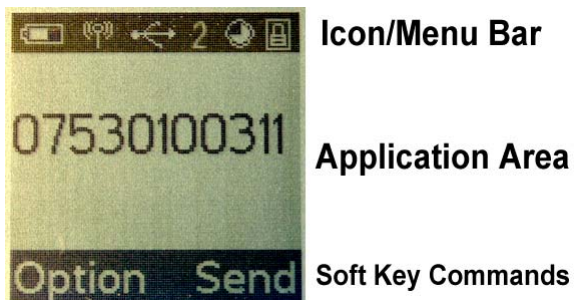
Section 1: CR3 Reader Overview

The CR3 has five major components that will be reviewed in this section.

1. LCD Screen
2. Scan Buttons
3. Soft Keys
4. Arrow Keys and Enter Key
5. Keypad

LCD Screen

The LCD screen provides feedback to the user about what the CR3 is doing. The screen is divided into three sections, the top icon/menu bar, the application area of the screen, and the lower bar containing soft key commands.



Scan Buttons

Press either of these two red buttons to scan codes with the CR3.



Soft Keys

The CR3 CodeViewer software uses the left and right soft keys to select commands shown on the bottom of the display.



Pressing the left soft key executes the command listed on the lower left portion of the screen.

Pressing the right soft key executes the command listed on the lower right portion of the screen. In most cases, the right soft key will be used to navigate back to a previous menu.

Arrow Keys and Enter Key

Use the arrow keys to navigate through menus on the CR3. Use the blue Enter key to enter data or to select an option listed on the screen. When data is stored in the CR3's memory, the default use of the left and right keys is to cycle through displaying stored data.



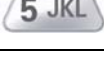
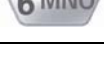
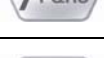
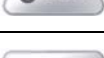
Keypad

The keypad uses standard cell phone T9 Mode to enter data. To type text in this mode, press the corresponding key until the correct letter, number, or symbol shows on the screen (in all modes except numeric mode). The table following explains the use of the keypad.

Locking the Keypad

To lock the keypad from accidental key presses or entry of data, press the Shift key and the up arrow key at the same time. Only the keypad will be locked. The trigger (red) buttons will continue to function. To unlock the keypad, press the Shift key and the up arrow key at the same time again.



	Description of Button Function			
Key	Numeric Mode	Upper Case Text Mode	Lower Case Text Mode	Symbol Mode
	Toggles between numeric characters, upper case text, lower case text, and symbol character input	Toggles between numeric characters, upper case text, lower case text, and symbol character input	Toggles between numeric characters, upper case text, lower case text, and symbol character input	Toggles between numeric characters, upper case text, lower case text, and symbol character input
	1	Space, 1	Space, 1	Space) < _
	2	A, B, C, 2	a, b, c, 2	! * = `
	3	D, E, F, 3	d, e, f, 3	" + > {
	4	G, H, I, 4	g, h, i, 4	# , ?
	5	J, K, L, 5	j, k, l, 5	\$ - @ }
	6	M, N, O, 6	m, n, o, 6	% . [~
	7	P, Q, R, S, 7	p, q, r, s, 7	& / \ Space
	8	T, U, V, 8	t, u, v, 8	' :] Space
	9	W, X, Y, Z, 9	w, x, y, z, 9	(; ^ Space
	0	0	0	Toggles between 4 sets of symbols – when pressed, each symbol set is displayed
	Backspace and clear messages	Backspace and clear messages	Backspace and clear messages	Backspace and clear messages

Clear Key

The CLEAR key can be used as a backspace key and will also clear messages from the main CodeViewer screen. In the Ready/Status screen, messages can appear, such as the data from the last scan and configuration command status messages.

To clear the displayed message, press the CLEAR key.

Icon Overview

The following table describes the icons used in the CR3 CodeViewer software.

Icon	Description
<i>Power Icons</i>	
	50% to 100% capacity of battery
	20% to 50% capacity of battery
	0% to 20% capacity of battery – recharge battery as soon as possible
	Battery is recharging
	No icon is displayed when battery blank is used with a cabled reader
<i>Connection Icon</i>	
	Reader is connected physically or wirelessly to a receiving device (computer, handheld, etc.) Note: Some RS232 configurations can not be detected
	No icon is displayed when the reader does not detect a connection
<i>Communication Mode Icons</i>	
	RS232 communication mode enabled
	PS2 communication mode enabled
	USB communication mode enabled
	Bluetooth communication mode enabled
<i>Packet Mode Icons</i>	
	One way mode – no acknowledgement required
	Two way mode – packetized, bidirectional communication between a CR3 and an application (may also indicate download mode)
	Keyboard mode – can be used as either USB keyboard or PS/2 keyboard input mode
	Virtual COM port 1 mode – data can be sent in one way mode
	Downloader mode – reader ready for firmware upgrade
	Secure mode – data encryption mode enabled
<i>Memory Icons</i>	
	No stored data to send
	Some stored data to send
	Memory is full – no available memory
	No batch mode – data will not be stored in the reader's memory if not connected
<i>Input Mode Icons</i>	
	Caps Lock – data entered manually on the keypad will be in capital letters
	Lower Case – data entered manually on the keypad will be in lower case letters
	Numeric – data entered manually on the keypad will be numeric
	Symbol – data entered manually on the keypad will be symbols
	Locked – buttons pushed on the reader's keypad will be ignored

Note: Icons may take up to 15 seconds to update after a setting has been changed.

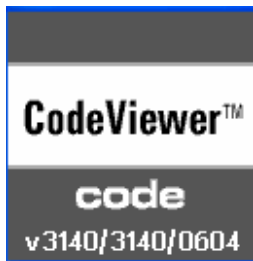
Section 2: Basic Functions

Starting the CR3

To begin using the CR3, you need to power it up using one of the following methods:

- Insert a battery *and* press and hold a red scan button (or the optional handle's red trigger button) for at least 2 seconds
- Attach the CR3 by a USB cable, a PS/2 cable, or an RS232 cable with power supply to a computer

After you power up the CR3, you will see the following startup screen:



Note: The startup screen shows the firmware version number. Make a note of this version number and provide it to Code's technical support staff if you call with questions about the CR3.

Note: The CR3 is programmed to automatically shutoff after two hours of non-use. To turn it back on, simply press one of the red scan buttons.

Scanning Codes

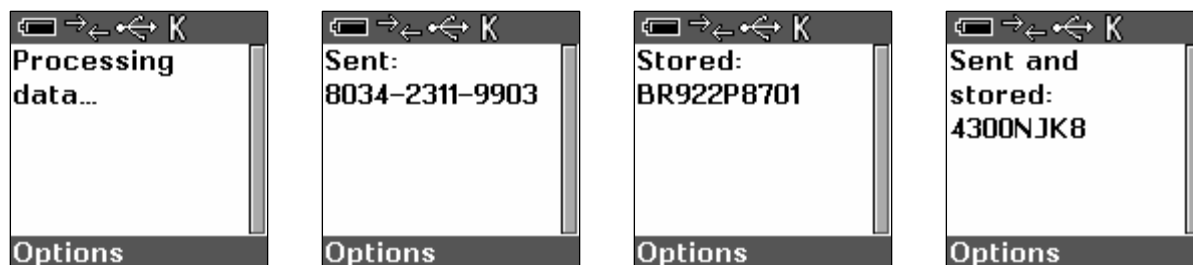
To begin scanning codes, simply press a red scan button. Your CR3 is ready to scan codes when you see the following screen with a Ready prompt:



Press either red button on the CR3 to scan a code (or the trigger on the optional handle).



Information stored in the scanned code is processed by the CR3, sent to a host computer and/or stored on the CR3, and the data is also displayed on the screen.



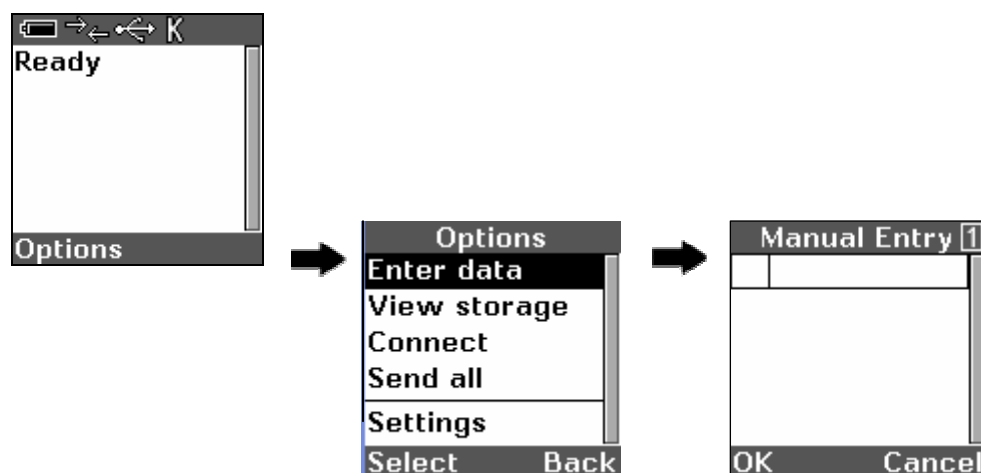
By default, the information scanned will be sent to a host computer (if the CR3 is connected to a host computer) and then erased from the CR3's memory. If the CR3 does not detect an attached host computer, the data will be stored in its memory. See Section 4 of this manual for more information on send/store settings.

Manually Entering Information

The CR3 CodeViewer software allows you to manually enter information. Use the instructions below for manually entering data.

Access the Manual Entry Screen

1. Begin at the **Ready** prompt screen.
2. Select **Options**.
3. Select **Enter data**.



Manually Enter Numbers, Text, and Symbols

In the manual entry screen, you can enter data in numeric, upper case text, lower case text, and symbol formats. By default, the CR3 is set to enter numeric characters when you use the keypad.

To toggle between **numeric** and **upper case** text input, press the Shift key.



To toggle between **upper case** and **lower case** text input, press the Shift key again.



To toggle between **lower case** and **symbol** character input, press the Shift key again. Press the **0** key to toggle between different sets of symbols.



To toggle back to **numeric** character input, press the Shift key again.



Manual Entry 1	
123	
OK Cancel	

Manual Entry A	
123ABC	
OK Cancel	

Manual Entry a	
123ABcabc	
OK Cancel	

Manual Entry *		
1	2 !	3 "
4 #	5 \$	6 %
7 &	8 .	9 (

After entering data in the manual entry screen, press **OK** or the Enter key to send and/or store the data.

Enter Key 

A confirmation message will appear as follows:

Sent and stored:	
123ABcabc!"#\$	
Options	

Manual Numeric Data Entry Shortcut: At the Ready screen, simply begin using the keypad to enter numeric data. The manual entry screen will appear as soon as you start pressing the numeric keys on the keypad.

Hint: Press the **0** key multiple times (in any entry mode except symbol) to cycle through all of the symbols one at a time.

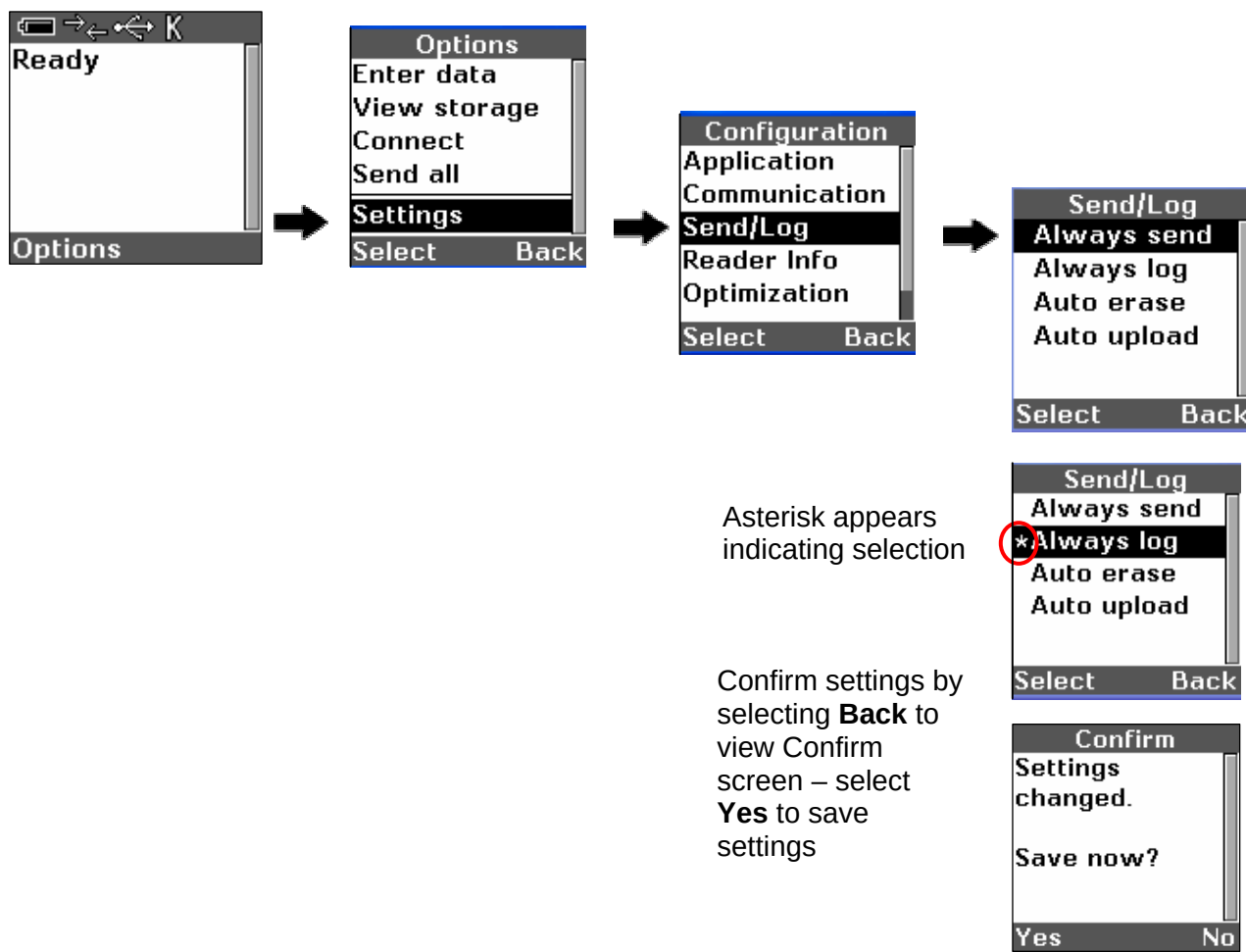


Section 3: Batch Mode

Data can be stored in the CR3's memory and then sent to a host computer later. When the CR3 stores data in its memory, the term "batch mode data capture" or "batch mode" is used.

Batch mode is disabled by default. To use the CR3 in batch mode, use the following steps:

1. Begin at the **Ready** prompt screen.
2. Select **Options**.
3. Press the down arrow twice to highlight **Settings**.
4. Select **Settings**.
5. Select **Send/Log**.
6. Press the down arrow button to highlight **Always Log**.
7. Press the left soft key to select **Always Log**. An asterisk (*) will appear before the **Always Log** to inform you that the option has been set.
8. Save settings by selecting **Back** to navigate to Confirm prompt and select **Yes**.



When you scan a code or manually enter information while in batch mode, you will get a confirmation message that the data has been stored as shown below:

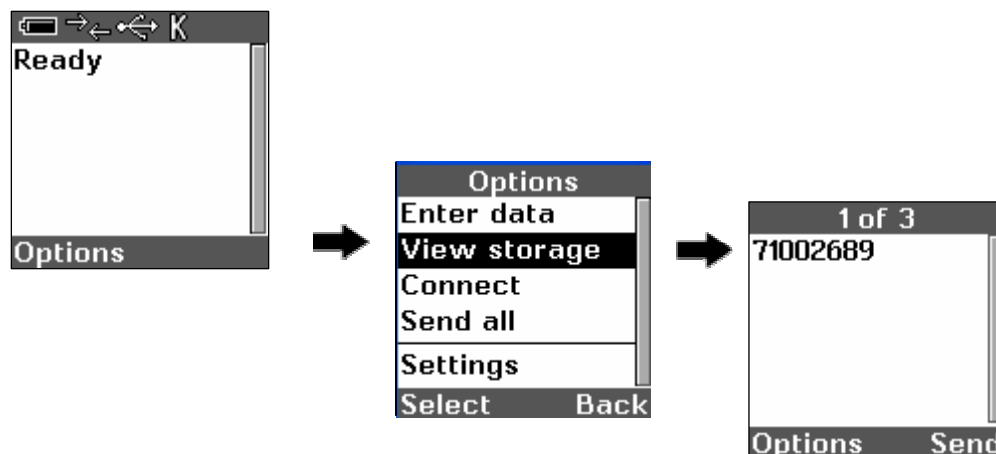


Viewing Stored Data

To view data stored on the CR3, use the following steps:

1. Begin at the **Ready** prompt screen.
2. Select **Options**.
3. Use the down arrow key to highlight **View storage**.
4. Select **View storage**.

The data is shown one entry at a time.



Use the right and left arrow buttons to scroll through the stored data.

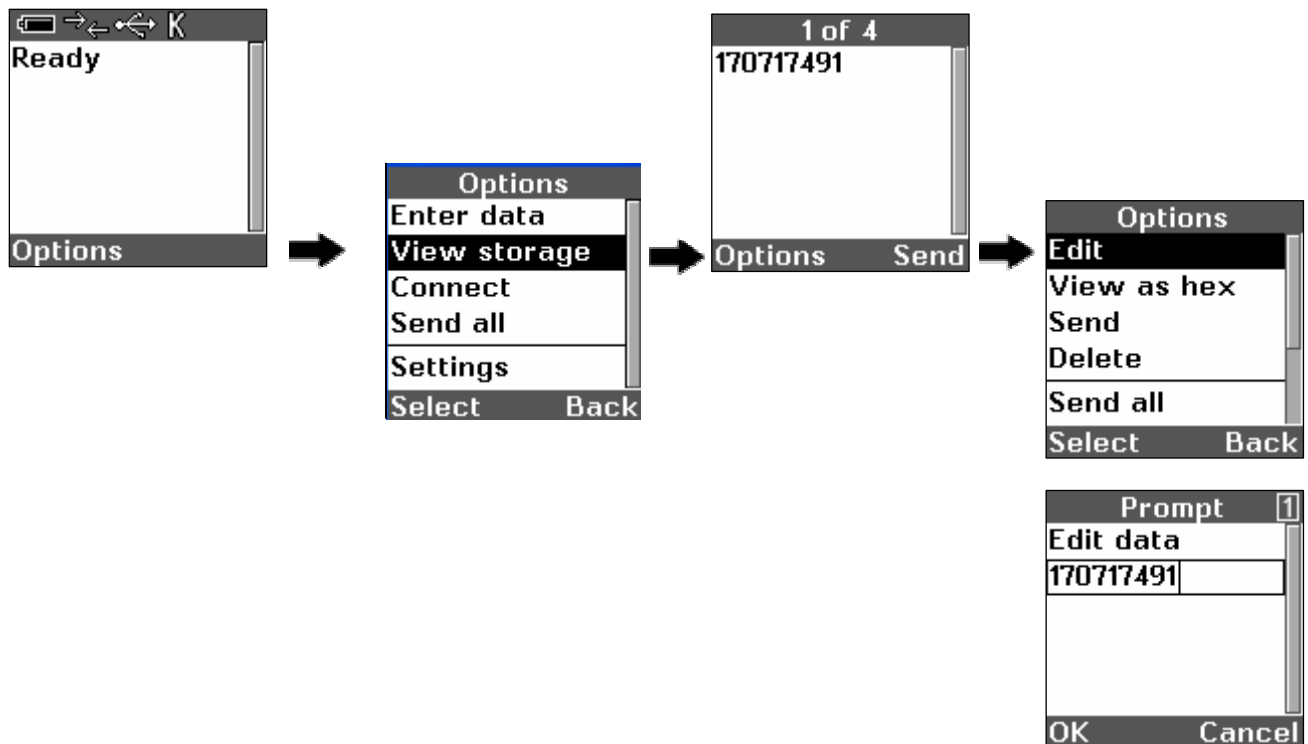


Shortcut: At the **Ready** prompt, simply press the right and left arrow buttons to scroll through stored data.

Editing Stored Data

To edit data stored on the CR3, use the following steps:

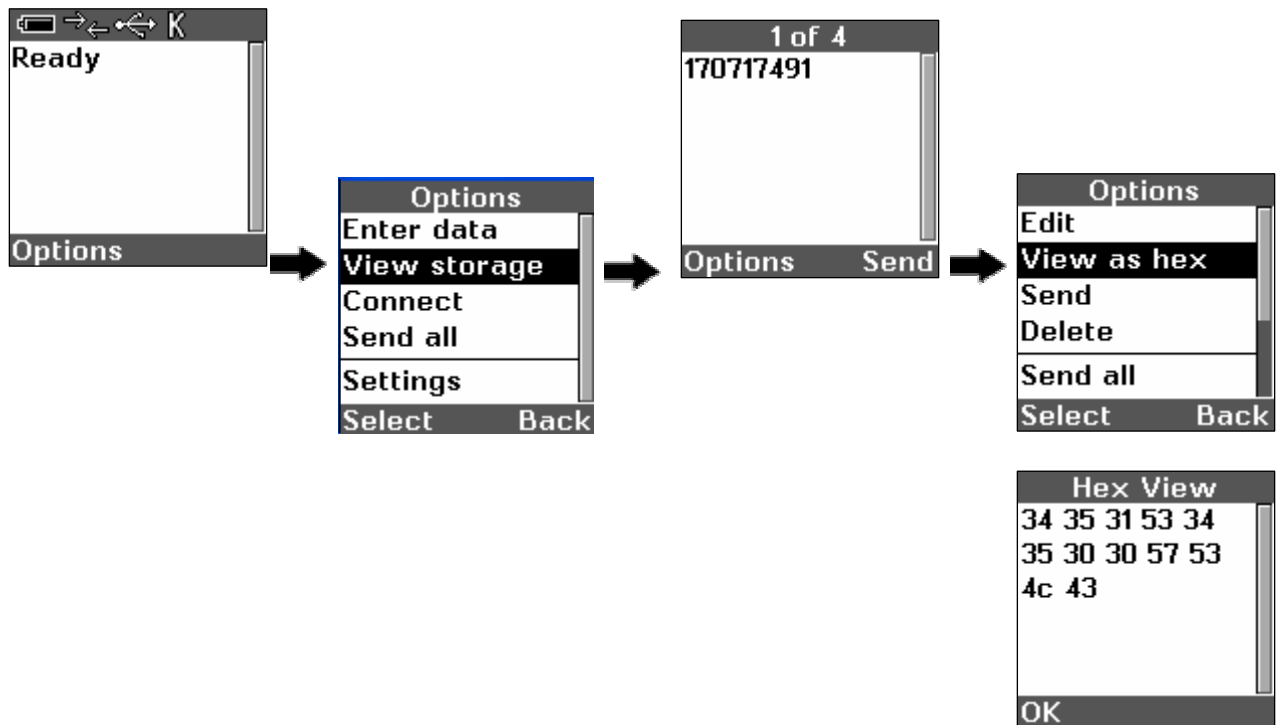
1. Begin at the **Ready** screen.
2. Select **Options**.
3. Press the down arrow to highlight **View storage**.
4. Select **View storage**.
5. Select **Options**.
6. Select **Edit**.
7. Edit the data.
8. Press the Enter key or select **OK** to complete the edit.



Viewing Stored Data in Hexadecimal Format

To view data stored on the CR3 in hexadecimal format, use the following steps:

1. Begin at the **Ready** screen.
2. Select **Options**.
3. Press the down arrow to highlight **View storage**.
4. Select **View storage**.
5. Select **Options**.
6. Select **View as hex**.



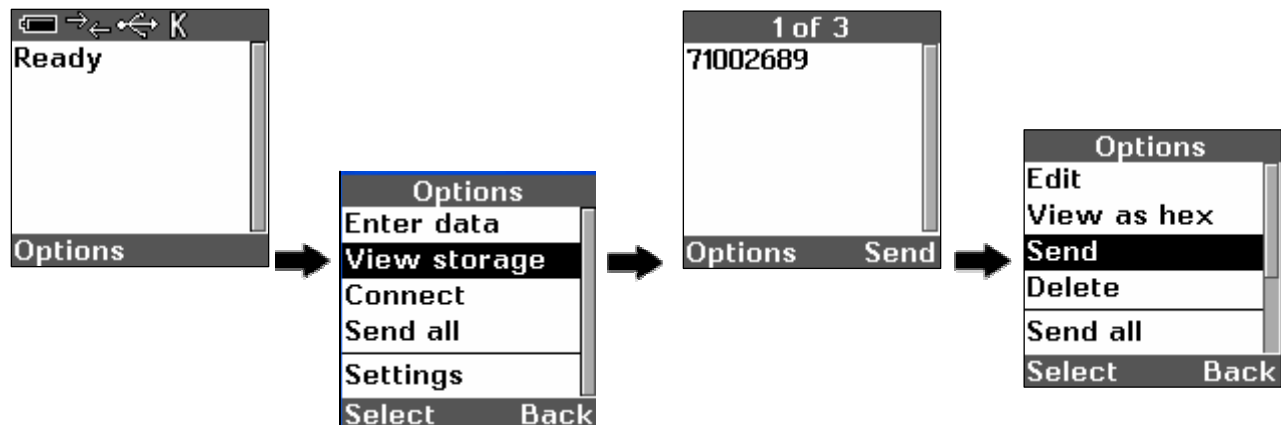
Sending Stored Data

To send or upload the data stored on the CR3 to your computer, use the following steps:

1. Connect the CR3 physically or wirelessly to your computer.
2. Begin at the **Ready** screen.
3. Select **Options**.
4. Press the down arrow to highlight **View storage**.
5. Select **View storage**.
6. Select the **Send** option to send data one entry at a time (or select **Send** from the **Options** menu).

-- or --

Select **Options** and then select **Send all**.



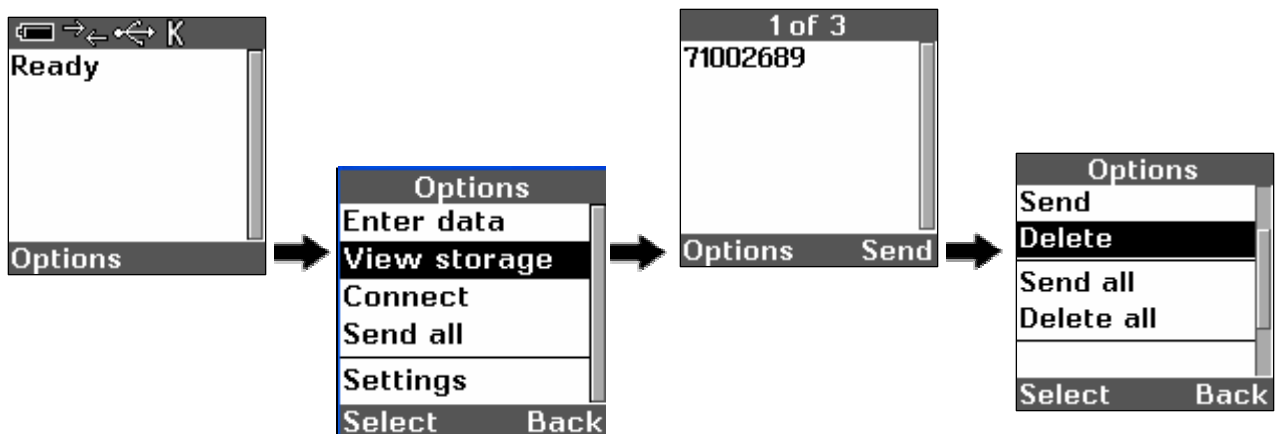
Deleting Stored Data

To delete data stored on the CR3, use the following steps:

1. Begin at the **Ready** screen.
2. Select **Options**.
3. Press the down arrow to highlight **View storage**.
4. Select **View storage**.
5. Select the **Delete** option to delete stored items one at a time.

-- or --

Select the **Delete all** option to delete all stored data.



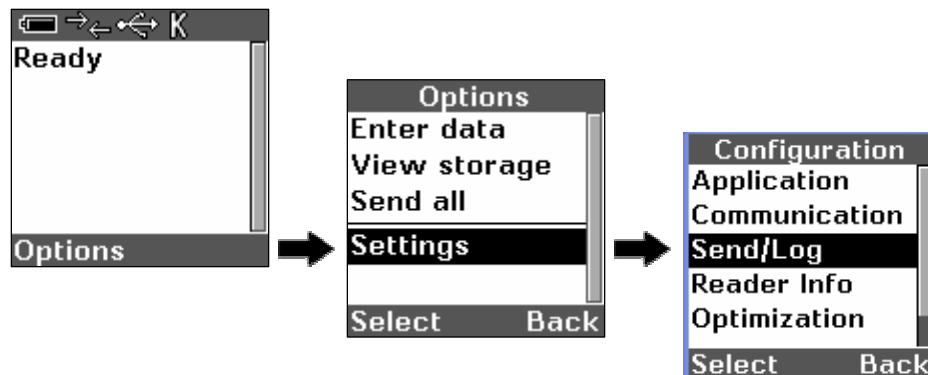
Section 4: Send/Store Settings

This section describes the send and store settings of the CR3.

Setting	Description
Always Send only	When this option is set (has an asterisk in front of it), data will be sent immediately to a connected host computer. If the CR3 is not connected to a host computer, the data will automatically be stored.
Always Log only	When this option is set, data will be stored in the CR3's memory and will not be sent to a host computer, even if the CR3 is connected to a host computer.
Always Send and Always Log	When both of these options are set, data will always be stored whether or not the CR3 is connected to a host computer and data will automatically be sent to the host computer if it is connected.
Auto Upload	When selected, all previously batched data will be sent when a connection is established.

To access the Send/Store Settings, follow these steps.

1. Begin at the **Ready** prompt screen.
2. Select **Options**.
3. Use the down arrow key to highlight **Settings**.
4. Select **Send/Log**.



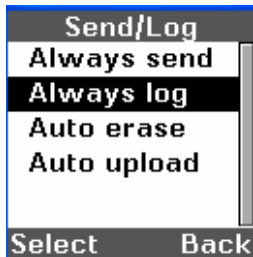
Always Send



Select **Always send** to have the CR3 immediately send data after it has been scanned or manually entered to a host computer when the CR3 is connected physically or wirelessly to that host computer. Data will be sent whether or not **Always store** is selected if you are connected to a host computer. Selection is verified by the appearance of an asterisk:

***Always send**

Always Log



Select **Always Log** to have the CR3 store scanned/manually entered data. Data will be stored even if it has been sent to a host computer. Data will be stored in individual entries until erased. If the **Always Log** option is not set, data will still be stored in the CR3's memory if it was not successfully sent to the host computer after being scanned/manually entered. Selection is verified by the appearance of an asterisk:

***Always log**

Auto Erase



Select **Auto erase** to have the CR3 erase stored data as soon as it has been sent to a host computer. (Data is sent when **Send** or **Send All** is activated or when **Always send** is set.) When the **Auto erase** option is set, when data is sent, it means that the data is both sent to a host computer and erased from the CR3's memory. Selection is verified by the appearance of an asterisk:

***Auto erase**

Auto Upload



Select **Auto upload** to send previously batched data immediately upon connection. This option is only used when CR3 is in batch mode. Selection is verified by the appearance of an asterisk:

***Auto upload**

Send/Log Defaults

Default settings are **Always send**, **Auto erase** and **Auto upload**.



Section 5: Configuring Your CR3

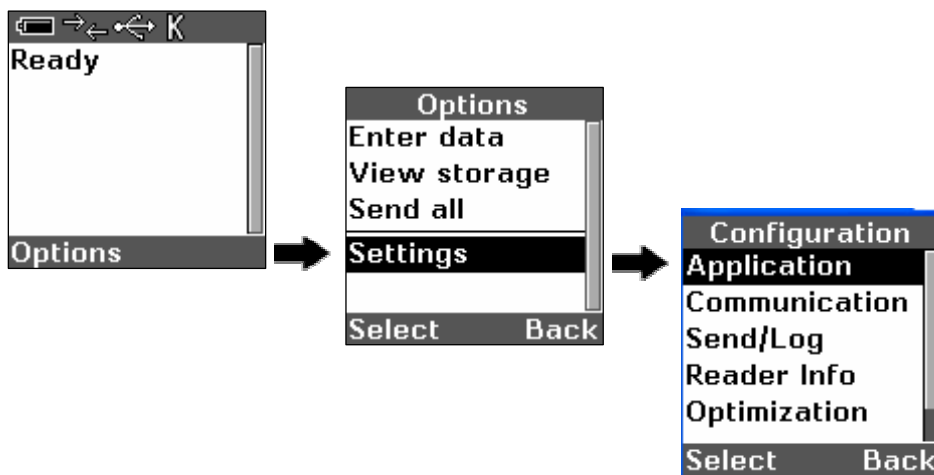
This section describes the process for configuring the CR3.

Note: All of the following configurations (and some not documented in this manual) can be set by scanning the m-codes found in the CR3 User Manual.

Note: After configuring the CR3, if you want to stop other users from changing the CR3's configuration, you can upload a configuration option file that stops users from accessing configuration menus. Please see the CR3 Application Programming Guide for instructions.

To configure the CR3, follow these steps to access the configuration menu.

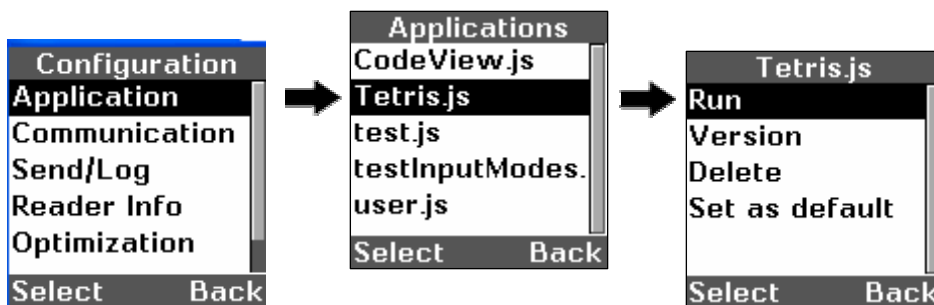
1. Begin at the **Ready** prompt screen.
2. Select **Options**.
3. Use the down arrow key to highlight **Settings**.
4. Select **Settings**.
5. The **Configuration** menu will be displayed.



Application Configuration

Use the Applications menu to run, check the version number, delete, or set as a default applications stored on the CR3.

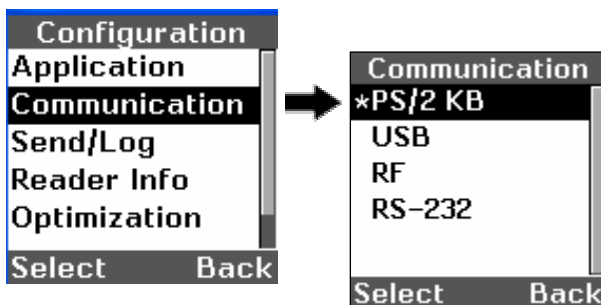
1. Select the **Application** menu.
2. Select a JavaScript application.
3. Run the application.
-- or --
Check the application's version number.
-- or --
Delete the selected application from the CR3's memory.
-- or --
Set the application as the default application.



Communication Interface Configuration

Use the Communication configuration menu to make changes to the CR3's communication modes.

1. Select the **Communication** menu.
2. Select the type of communication interface to your computer that you want to use. You must have the correct cable if you use a cabled method.

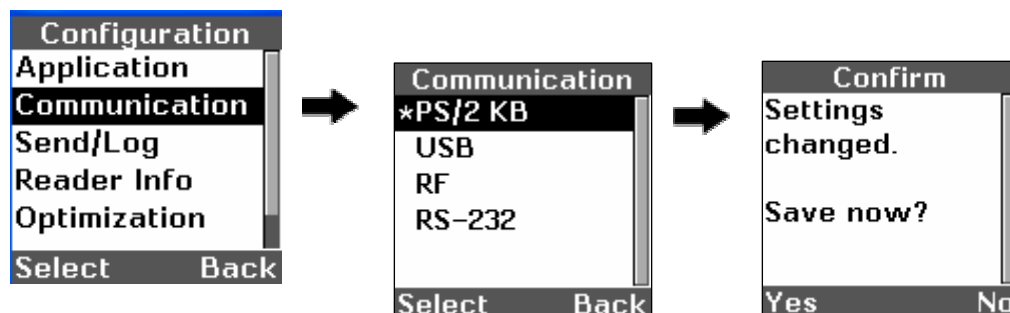


PS/2 Keyboard Communication Interface

Use this communication interface if you want to use the CR3 with a PS/2 cable.

1. Select **PS/2 KB**. Selection is verified by the appearance of an asterisk.
2. Confirm the settings change by selecting **Yes**.

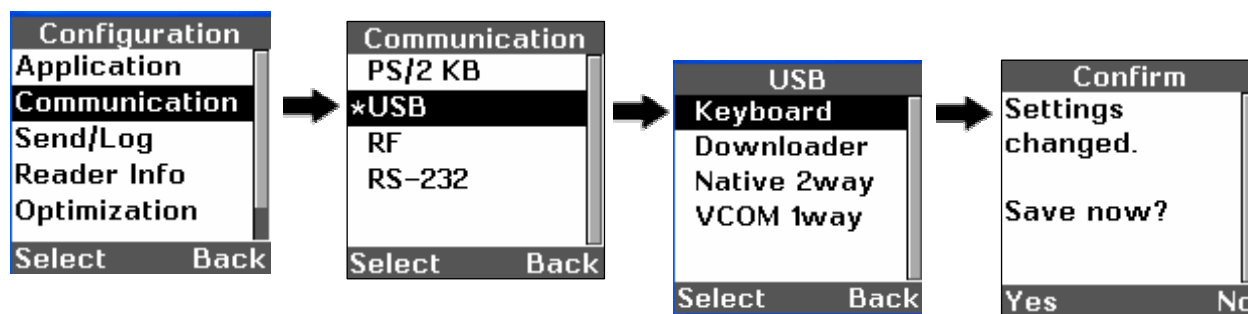
Note: All changes you have made to the CR3's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the CR3 is powered off and powered back on. If you answer **No**, the changes to the CR3's settings will be made temporarily and will only be in effect until the CR3 is powered off.



USB Communication Interface

Use this communication interface if you want to use the CR3 with a USB cable.

1. Select the **USB** interface. Selection is verified by the appearance of an asterisk.



2. Select **Keyboard** to use the CR3 in a keyboard mode with a USB cable.
-- or --
Select **Downloader** to use the CR3 in a download mode with a USB cable.
-- or --
Select **Native 2way** to use the CR3 in a bidirectional communication mode with a USB cable.
-- or --
Select **VCom 1way** to use the CR3 in a Virtual COM port mode with the USB connection simulating an RS232 connection.

3. Confirm the settings change by selecting **Yes**.

Note: All changes you have made to the CR3's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the CR3 is powered off and powered back on. If you answer **No**, the changes to the CR3's settings will be made temporarily and will only be in effect until the CR3 is powered off.

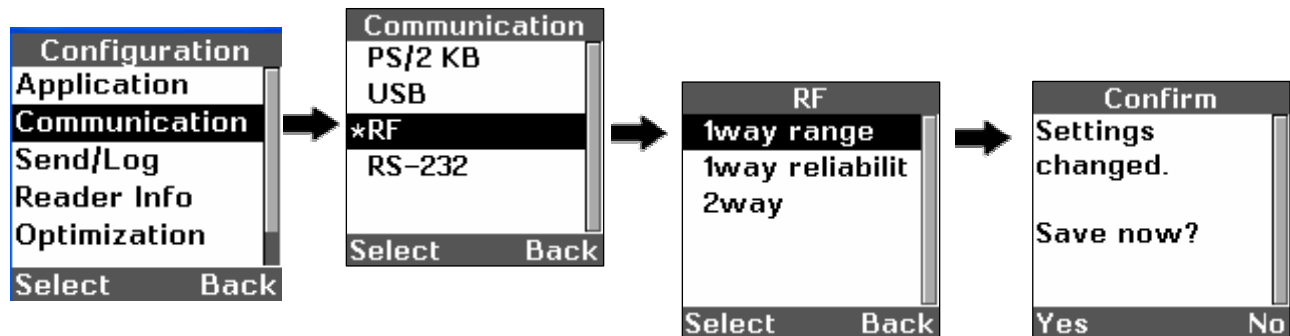
RF – Bluetooth Communication Interface

If your reader has a Bluetooth radio installed, this option will appear. Use this communication interface if you want to use the CR3 with a Bluetooth radio connection.

1. Select the **RF** interface. Selection is verified by the appearance of an asterisk.
2. Select **1way range** to use the CR3 in a one way Bluetooth mode to get the maximum range.

-- or --
Select **1way reliability** to use the CR3 in a one way Bluetooth mode to get a higher degree of connection reliability with shorter distances from your computer.

-- or --
Select **2way** to use the CR3 in a two way Bluetooth mode to use bidirectional communication between the CR3 and the host computer.
3. Confirm the settings change by selecting **Yes**.



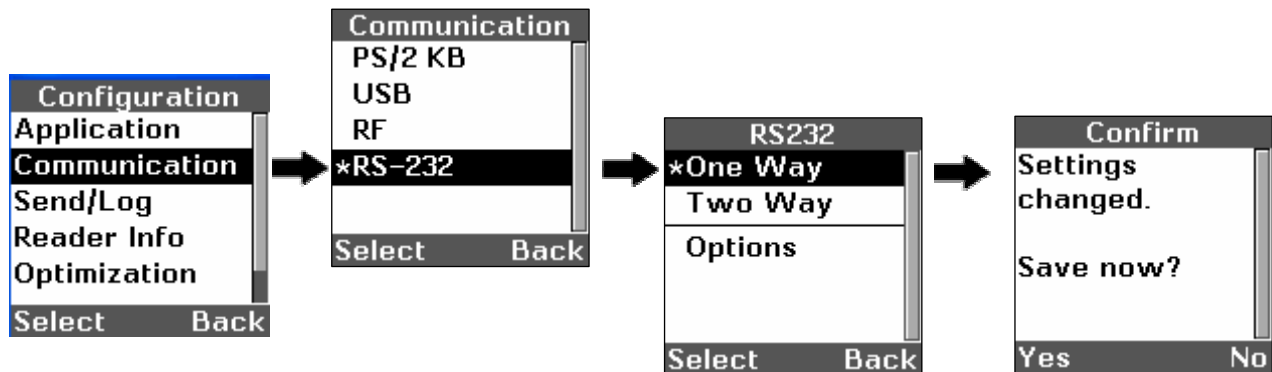
Note: All changes you have made to the CR3's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the CR3 is powered off and powered back on. If you answer **No**, the changes to the CR3's settings will be made temporarily and will only be in effect until the CR3 is powered off.

RS-232 Communication Interface

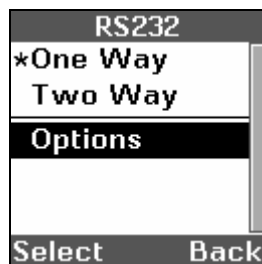
Use this communication interface if you want to use the CR3 with an RS-232 cable.

1. Select the **RS-232** interface. Selection is verified by the appearance of an asterisk.
2. Select **One way** to use the CR3 in a one way communication mode with the host computer.
-- or --
Select **Two way** to use the CR3 in a bidirectional communication mode with the host computer.
3. Confirm the settings change by selecting **Yes**.

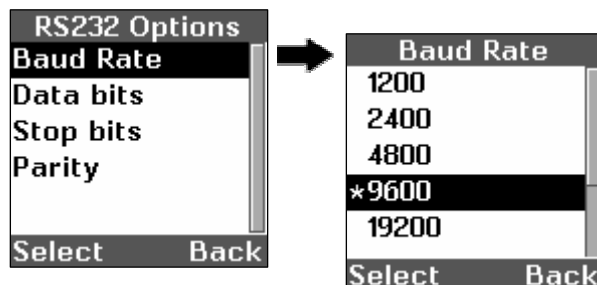
Note: All changes you have made to the CR3's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the CR3 is powered off and powered back on. If you answer **No**, the changes to the CR3's settings will be made temporarily and will only be in effect until the CR3 is powered off.



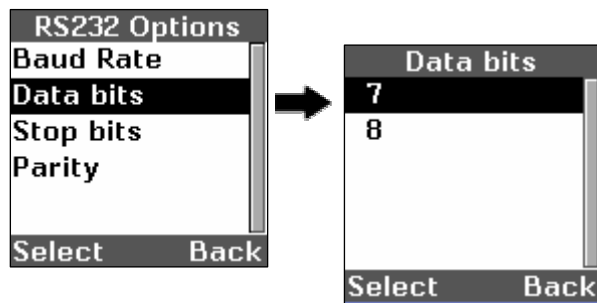
4. Set the RS-232 communication options.
 - a. Return to the RS-232 communication interface configuration menu and select **Options**.



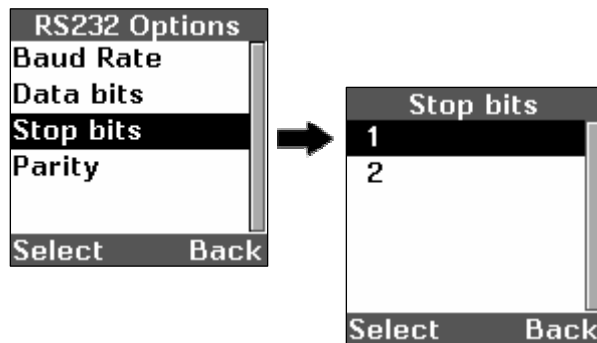
- b. Set the **Baud Rate** to match the baud rate of the host computer application.



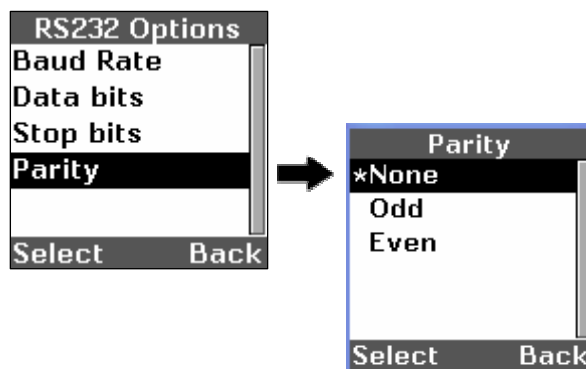
- c. Set the **Data bits** to match the data bits setting of the host computer application.



- d. Set the **Stop bits** to match the stop bits setting of the host computer application.

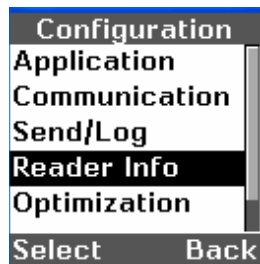


- e. Set the **Parity** to match the parity setting of the host computer application.



CR3 Information

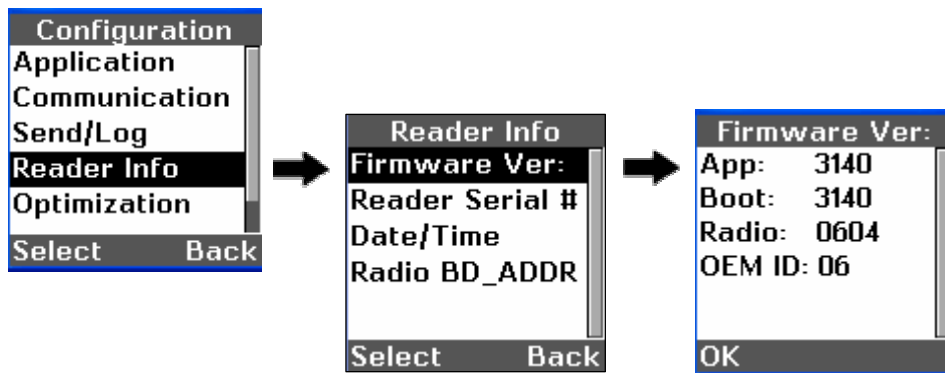
You can find information about the current configuration of the CR3 by accessing the **Reader Info** menu.



Firmware Version Number

The CR3's current firmware (software stored in the reader's memory) version number can be displayed. This firmware version number may help technical support answer your questions more easily.

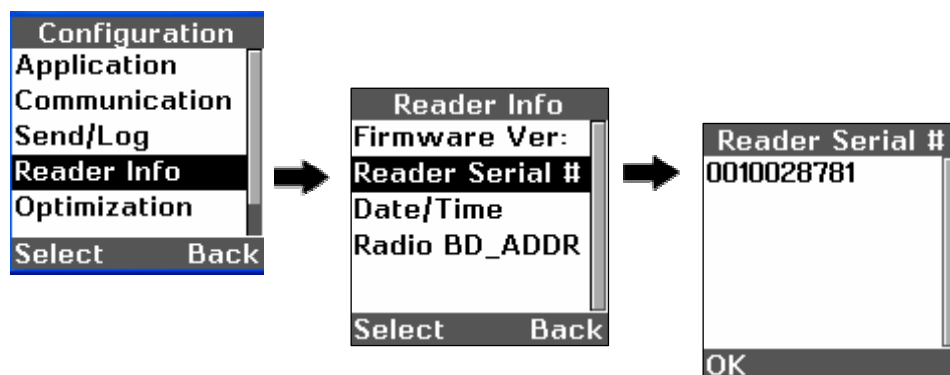
1. Access the **Reader Info** menu from the **Configuration** menu.
2. Select **Firmware Ver:.** The version numbers of the different firmware applications currently running on the CR3 are displayed.



Reader Serial Number

The CR3's serial number can be displayed.

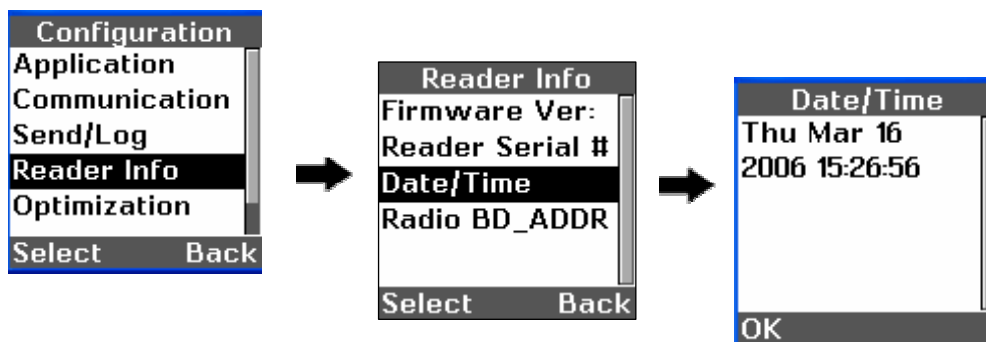
1. Access the **Reader Info** menu from the **Configuration** menu.
2. Select **Reader Serial #**. The CR3's serial number is displayed.



Date and Time

The current date and time that is set on the CR3 can be displayed. To change the date and time, see the **System Configuration** section of this manual.

1. Access the **Reader Info** menu from the **Configuration** menu.
2. Select **Date/Time**. The CR3's date and time setting is displayed.

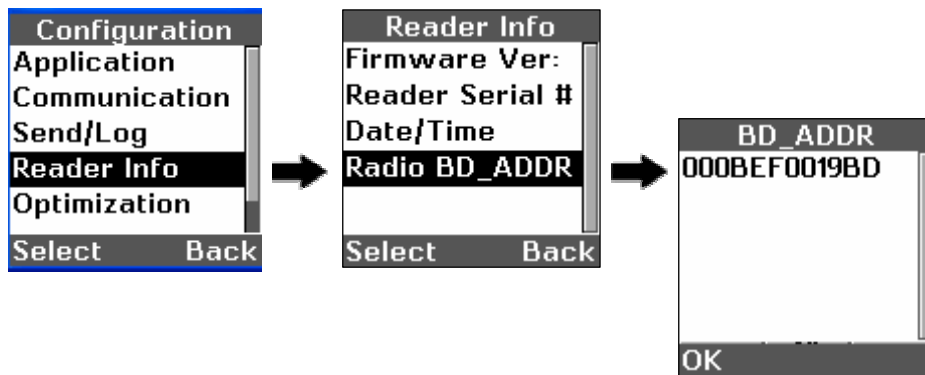


Note: The time displayed on this screen will not be automatically updated. It will only show the time when the button was pressed.

Bluetooth Address

If your reader has a Bluetooth Radio installed, this option will appear. You may need to know the Bluetooth address of the CR3 for applications that need to connect to and communicate with the CR3.

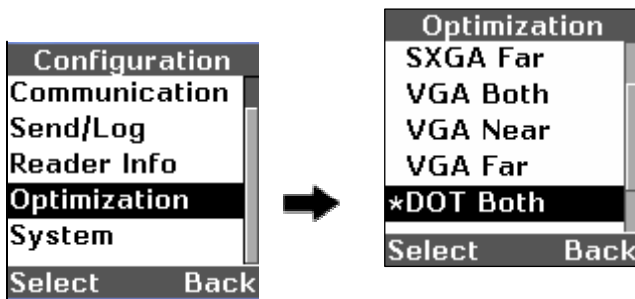
1. Access the **Reader Info** menu from the **Configuration** menu.
2. Select **Radio BD_ADDR**. The CR3's Bluetooth address is displayed.



Optimization Configuration

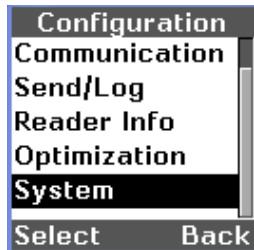
You can set the CR3 to be optimized for reading codes of varying sizes and varying densities. To understand what the different optimization settings are, please see Chapter 2 of the CR3 User Manual.

1. Access the **Optimization** menu from the **Configuration** menu.
2. Select an optimization mode. An asterisk will appear next to the selected option. See Chapter 2 of the CR3 User Manual for optimization setting explanations.



System Configuration

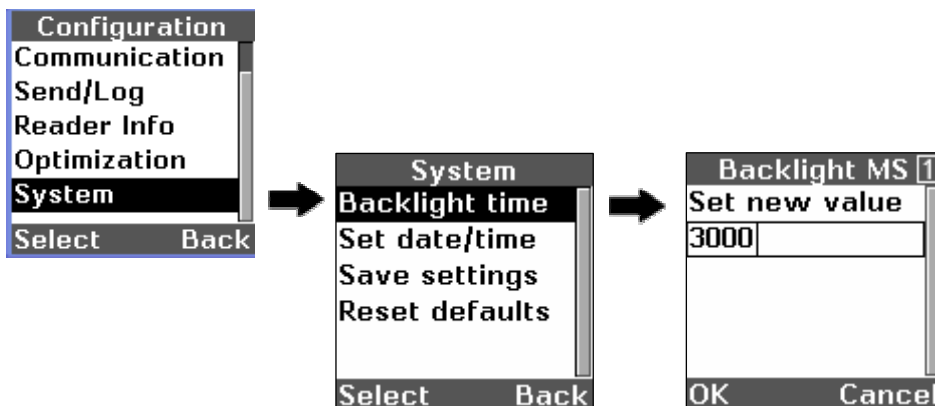
Use the **System Configuration** menu to configure system settings.



Backlight Time

Set the amount of time the CR3's backlight stays on. This setting is in milliseconds. *Note: Longer backlight times will cause the CR3 to use more battery power.*

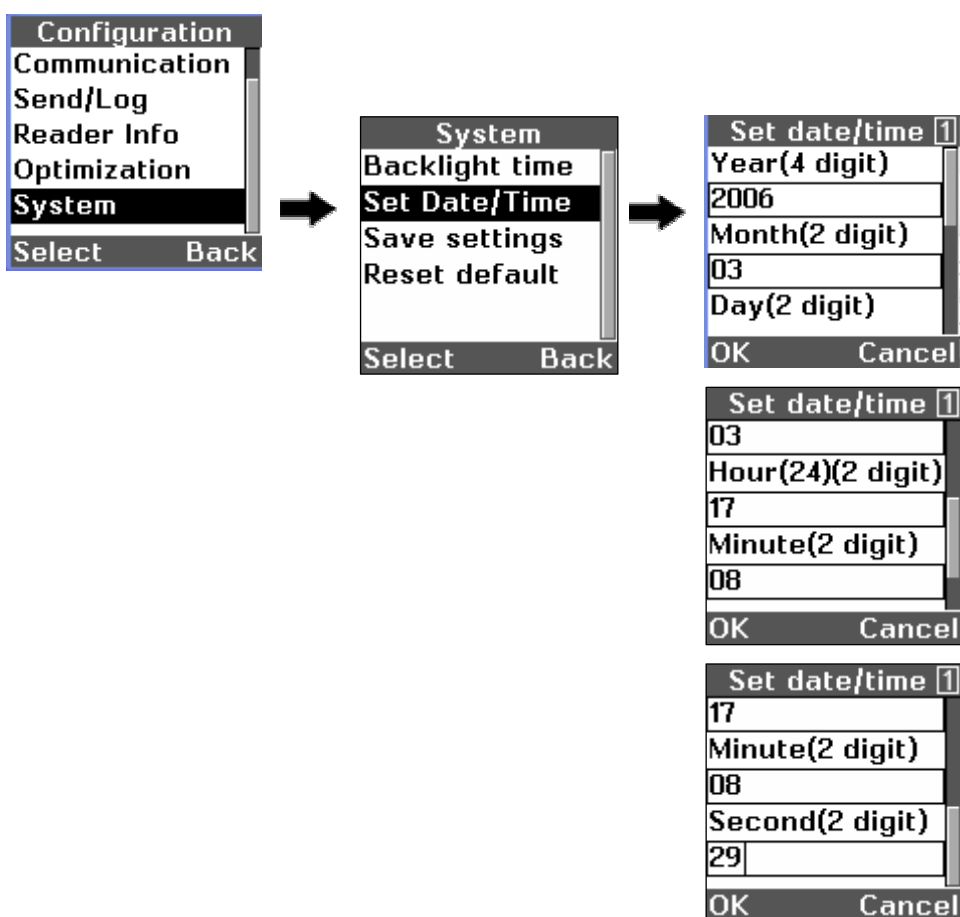
1. Access the **System** menu from the **Configuration** menu.
2. Select **Backlight time**.
3. Enter a new value for the time the backlight stays on in milliseconds. (3000 milliseconds = 3 seconds)



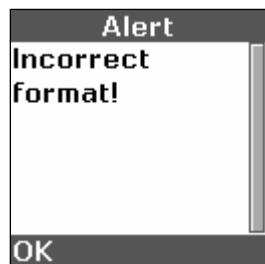
Set Date/Time

Set the current date and time.

1. Access the **System** menu from the **Configuration** menu.
2. Select **Set Date/Time**.
3. Change the date and time in each of the fields by pressing the Clear key to delete the data. Enter corrected information in each field: the year in 4 digit format, the month in 2 digit format, the day in 2 digit format, the hour in 24 hour 2 digit format, the minute in 2 digit format, and the seconds in 2 digit format. Use the arrow keys to move from field to field.



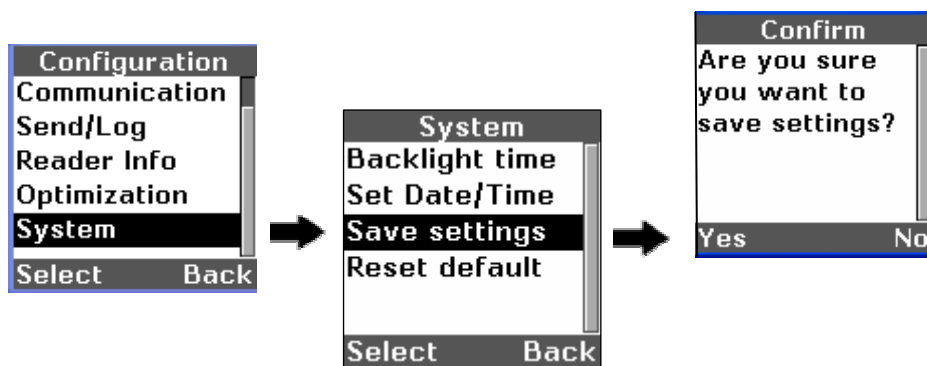
You must enter the date and time in the format shown in the example above. You will get the following error if an incorrect format is used.



Save Settings

Save CR3 configuration changes you have made with this option. This option saves configuration settings to the CR3's memory, so the next time you power on the CR3, the settings will be available. Otherwise, the configuration changes you have made will be lost after you power off the CR3.

1. Access the **System** menu from the **Configuration** menu.
2. Select **Save settings**.
3. Select **OK** to confirm that you want the configuration settings you have made to be stored in memory.



Reset CR3 to Factory Defaults

If you need to reset the CR3 to its factory default settings, use this option.

1. Access the **System** menu from the **Configuration** menu.
2. Select **Reset defaults**.
3. Select **Yes** to confirm that you want to reset all of the CR3's configuration settings back to the factory default settings or select **No** to cancel.
4. Confirm whether or not you want to save the settings to the CR3's memory. Select **Yes** to save the factory default settings to memory so that they are in effect the next time the CR3 is powered on. Select **No** to have the setting changes made temporarily until the CR3 is powered off.

